

# PATENT COOPERATION TREATY

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From the  
INTERNATIONAL SEARCHING AUTHORITY

## PCT

To:

see form PCT/ISA/220

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43bis.1)**

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/B2005/050698

International filing date (day/month/year)  
25.02.2005

Priority date (day/month/year)  
01.03.2004

International Patent Classification (IPC) or both national classification and IPC  
H04L7/02

Applicant  
KONINKLIJKE PHILIPS ELECTRONICS N.V.

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/IB2005/050698

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

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PCT/IB2005/050698

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**Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	1-10
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-10
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

Reference is made to the following documents:

D1: US 2002/181631 A1 (MACKEY RICHARD P ET AL) 5 December 2002

D2: US 2003/165158 A1 (DAVIES MICHAEL I ET AL) 4 September 2003

**1. Lack of inventive step**

1.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claims 1 and 10 does not involve an inventive step in the sense of Article 33(3) PCT.

1.2 The document D1, regarded as being the closest prior art to the subject-matter of independent claim 1, discloses (the references in parentheses applying to this document):

A circuit comprising a first and a second circuit module (paragraph [0022]; Fig. 3 (300, 302, 304)) and a synchronization module (Fig. 3 (306)), the first and the second module being mutually a-synchronous (paragraph [0001]), and being coupled by the synchronization module (Fig. 3 (302, 304, 306), the synchronization module comprising

- a transfer register (paragraphs [0023], [0024]; Fig. 3 (311, 313)) for storing data which is communicated between the two circuit modules,
- a control circuit for controlling the register (paragraphs [0023], [0026]-[0029]; Fig. 3 (312)) in response to a respective timing signal from the first and the second circuit module (Fig. 3 (SCLK, DCLK)), the control circuit comprising a control chain (paragraph [0026]; Fig. 4) for generating a control signal (Fig. 3 (315, 317)) for the transfer register, the control chain including
- at least one edge sensitive element for delaying a change in the signal value until a transition in a selected one of the timing signals is detected (paragraphs [0026]-[0029], [0031]; Fig. 4).

- 1.3 The subject-matter of claim 1 therefore differs from this known synchronization module in that the control circuit does not include a **repeater**.
- 1.4 The technical advantages of this feature over the synchronization module proposed in D1 are not indicated by the applicant, neither the description, on page 3, lines 8, 15, 16, where this feature is further explained, gives any support in this respect. The distinguishing feature does not add anything of inventive significance to D1 because it does not resolve any technical problem and, thus, it would be a matter of design option to the person skilled in the art. Therefore, claim 1 is not allowable under Article 33(1) PCT as it does not involve an inventive step in the sense of Article 33(3) PCT.
- 1.5 The same reasoning applies, mutatis mutandis, to the subject-matter of the corresponding independent method claim 10, which therefore is also considered not inventive.

## 2. **Dependent claims**

- 2.1 Dependent claim 2-9 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step.

The subject-matter of claims 2-9 is already disclosed in document D1 (paragraph [0038], [0041]; Fig. 3 (314); Fig. 5) and D2 (paragraphs: [0002], [0008], [0011], [0035], [0045], [0046], [0049]; Fig. 1; Fig. 2) or represents an obvious design feature for the person skilled in the art.

- 2.2 In claim 2 the sentence "upon detection of a **difference** between an input and an output of the transfer register" is unclear. The terms "**difference** between an input and an output" are too vague and leave the reader in doubt as to the meaning of the technical feature to which they refer, neither the description gives any help in this sense.

**WRITTEN OPINION OF THE  
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AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/IB2005/050698